The Burial of Sir Benjamin.

## NEWS OF THE THEATRES.

Only one of the companies regarded as New York fixtures is in town yet, or to be here within more than a month. The exception is Charles Frohman's Comedians, playing "Settied Out of Court" at the Fifth Avenue so well as to maintain fully a reputation gained by former successes. This organization has a wonderfully facile and entertaining light comedian in Joseph Holland, and a captivating leader of the succession. ing leader of its bovy of charming actresses in Georgie Drew Barrymore. Its make up and management are such as to ensure to it. ap-parently, a place at the very front among the permanent companies. It was hoped that these players would be seen in two these players would be seen in two or more pleces during the short senson at the Fifth avenue, but the prosperity of "Settled Out of Court" seems to preclude an alteration of bill. That may be an all-sufficient business reason, but it would be better for Charles Frohman's comedians. If not for his book of, if they could get the bencheial experience which would come of frequent changes of work. Not alone are they to be kept in "Settled Out of Court," but a second company will be sent travelling with it. The stock companies of A. M. Palmer, Daniel Frohman in "Settled Out of Court," but a second company will be sent travelling with it. The stock companies of A. M. Palmer, Daniel Frohman, Augustin Daily, and charles Frohman are all wanderers still. Mr. Palmer's party is playing. "Alabama," in the far West. Mr. Palmer is on his way back from Europe. It is not known whether he is bringing any foreign plays. His theatre will be occurred from Oct. 3 to the middle of November by John Drew and "The Masked Ball," and thereafter to the end of 1892 by Bronson Howard's "Aristocracy," both Frohman enterprises. The Lyceum company is just assembled in St. Louis by Daniel Freiman for a tour prior to its return home in October. Augustin Daily sneters have been West while be is in Louis by Daniel Freiman for a tour prior to its return home in October. Augustin Daily sneters have been West while be is in Louis by Daniel Freiman for a tour prior to its return home in October. Augustin Daily sneters have been West while be is in Leunden. His theatre will be given over to Richard Manshield, commencing Sept. 12, for three weeks before the start of the regular season in October. Charles Frohman's stock company will have to stay out of the city until the completion of his Empire, a theatre for which great elegance is promised. The date for the opening is Dec. 25, and a new American drama is then to be put forth. Edward Harrigan's company must be classed with the permanences. Its season will begin with a revival of an old Harrigan play wi

The single new play in town to-morrow night will be "The Face in the Moonlight." It is from the pen of Charles Osborne, an English dramatist, who has furnished to the London is from the pen of Charles Osborne, an English dramatist, who has furnished to the London Stage a number of meritorious works, some of which have gained performance in this country. One of them, "A Midnight Marriage," was acted by William Redmund and Mrs. Thomas Barry on the circuits a few seasons ago, and was then conspicuous for its dramatic situations and its terse dialogue. "The Face in the Moonlight" has been purchased for American territory by Robort Mantoli, and with Towns of the Moonlight of the Moonlig

A bountiful supply of light opera is still offered on Broadway, but there is nothing with an aspect of nowness, unless l'almer's revival of "Patience" may be considered a semi-nov-elty. The Dixey troupe will air the charming of "Patience" may be considered a semi-novelty. The Dixey troupe will air the charming old work on Tuesday night. To-morrow night they will sing. The Mascot. for the last time, and, to commemorate its unexpectedly long run, souvenirs will be distributed. In "Patience." Dixey will naturally sing the modificar role. The missi is not exacting, and the opportunities for drollery are numerous and excellent, so that a very interesting performance may be anticipated. Two newcomers will appear also. Lenoro Snyder, who has not been heard here in several years, will make her return as a nearly sears, will make her return as a nearly sears in the comes from London, and for several seasons he was in D'Oyly Carle's Savoy forces. Later he aided the German-Reeds in their entertainments. Browne's London repute is excellent, and his debut will attract attention. The Dixey season at Falmer's has been prosperous; what is more to the point, it has been artistically successful. It will continue through September. Two other comic operas current are "The Vice Admiral" at the Casino and "Wang" at the Broadway. The former has only a fortaight left in its run, for the Casino's the cream as a comic opera house will end on Sept. 10, but "Wang" is to have a lengthy revival, if the public support warrants as much. "The Lady or the Tigor," it is certain, will not be revived for a month yet. T. Henry French, who now controls the Broadway, says definitely that it is his plan ultimately to devote the house entirely to comic opera. There are contracts standing which will have to be filled, but when these are discharged French intends to reserve all the time for Lillian Rusare contracts standing which will have to be filled, but when these are discharged French intends to reserve all the time for Lillian Rus-sell, the Bostonians. Francis Wilson, and the De Wolf Hopper. In this way it is more than likely that a new "home of comic opera" will be established.

A new comedian will come into Broadway

Sadie McDonald. Carline: Nestor Lennon, Ru-dolphe, and the veteran W. H. Bartholomew, Von Puffingrantz. There is a clear field for "The Black Crook" at the Academy, and it may run all winter if the managerial hopes are not astray.

Plays on the old Righto are "A Kentucky Colone!" and "Killarney." Each has an assemblage of good actors, but the Irish drama is the cleverer, though it is by far the least protentious. Katie Emmett has unquestionably delighted her audiences at the Star. She is pretty, graceful, and earnest, and in hoy's clothes she is an altogether bewitching figure. Shrewdness and generosity mark the accessories in "Kiliarney." The scenery is admirable, and the company is evenly balanced and competent. This week ends the engagement, however, for Miss Emmett has gained the Broadway endorsement, and that was her manager's chief object in bringing her to the Star. Roland Reed will enter that theatra next week in a rôle new to the down-town stage—that of Applain Almer Tarkox in "Lend Me Your Wife," which he has presented with considerable success in other cities. It is from the same French source which has furnished "Jane" to us in a different form. "A Kentucky Colonel" at the Union Square has been very much altered since it was first produced on Monday night. McKee Rankin has cut out the camp-meeting scene in the second act, and has rewritten that part of it so as to make the story more connected and better understood. The actors, too, have become perfect, and the drama now has a fair chance to win lasting prosperity. Its engagement at the light the Liliputians will reappear in town.

The east side stage is not without its new thing this week. It will be on view at the is the cleverer, though it is by far the least

thing this week. It will be on view at the Windsor, in the lower Bowery, and it is likely to get a warm welcome there, because it is an Irish drama with a full-flavored Irish title—"The Shamrock." Edwin Hanford, its star, makes in this piece his first conspicuous essay in town. He is young, and he has been acted out of town of late, and a smooth performance is probable. Bella Hanford is the soubrette. The first act shows the Kerry races in Ireland, in which six horses are to take part; the second takes place in an Irish cable home; the third in London, and the fourth in a pensant's cottage in Ireland. The play is to be presented with new scenie and incendancel effects. Dan McCarthy's Irish drama, "The Cruiskeen Lawn," comes to Jacobs's this week. This play is one of the few Irish dramas in which the redecat and the black bottle are not important factors. It was performed in the Bowery last season, and it abounds in catchy music, good dancing, and sightly scenery. A novelty in mechanical effects is introduced in the third act. During the singling of an Irish song, a dissolving view is used to show the principal scenes in Ireland. Special: "shaws heen introduced since the last appea, ance of the play in this city." The Cruiskeen Lawn "will remain two weeks at Jacobs's. The People's play this week is "The Vendetta." which has been acted on the east side once or twice before, and is recalled as a very vivid and interesting work. Its revival this year arises from the presence at the head of the cast of Henry Bergman, the young and forceful actor who played Waison Find, the broker, in "The Henrietta," and was subsequently a valuable figure in "The Senator," Bergman is ambitious of stellar honors, and this is his first good chance. The outcome will be watched with interest. Harlem's east side theatre, the popular-priced columbus, will have a spectacular burlesque. Souder and Fly, to-morrow night. It is not unfamiliar down town, but it will be novel in Hariom, whore it is likely to delight its spectators. The troupe is one of M. B. Leavitt's various ventures. M Windsor, in the lower Bowery, and it is likely to get a warm welcome there, because it is an

This week's vaudeville programmes are check full of interest. At Tony Pastor's much curiosity is manifested over the billing of curiosity is manifested over the billing of Harry Kernell, the Irish comedian, whose mind is said to have become slightly untalanced. Kernell has long been a favorite with Paster's patrons and it will require a cool head and a stout heart to brave the welcome likely to be extended to him to-morrow night. William Jerome, the welknown song author, has returned from his European trip, and will be a fellow cutertainer with Kernell. The others on Paster's list include Bonnie Thornton, John W. Ransome, Cain and Orndorff, Lowry and Evans, Daly and Devere, the King sisters, and the sisters Devere, assisted by T. A. Devere. The Eden Musée's regular fall and winter season opens to-morrow night, when a pair of imported performers will make their first appearance in this country. They are a man and a woman, named respectively Gulbal and Greville, and they do conjuring in a new style. Their foreign credentials are first class. The Eden's standard features in the way of waxworks and pictures remain unchanged. Koster & Bial's holds its own, and the preparations in progress for opposition concert halls in the near future don't seem to affect the managementone whit. The Parisian dance duettists. Dufour and Hartley, are still in favor, while the latest newcomer, Amann, has proved himself a careful and able mimic. The agile brothers Borain, graceful Dorothy Denning, and the volatile Nada Reyval are retained. There is no change in the burlesques. On Sept. 3 Marie Vanoni is to make her reappearance. Harry Kernell, the Irish comedian, whose

Plans are under discussion for a fitting finish to the vogue of roof gardens and open-air spectacles. The closing weeks at Elderado will be made conspicuous by the introduction of a made conspicuous by the introduction of a number of novelties. The balle is to be changed, the circus performance improved, and the concerts made more elaborate. The pretty park on the Palisades never looked so attractive and refreshing as it does now. The lawns are green and the foliage is assuming an autumnal hue. In fact, it is to the natural beauties of the place that a deal of the success of Eldorado is due, yet not the slightest quibble can be made over the quantity and quality of entertainment offered. Down at Manhattan Beach, within sound of the surging surf, Gilmere's musicians are induging in their annual jubilee of melody. The vocal effects are well looked after by Flora Finlayson, Ida Klein, Eugene Cowles, and Victor Clodio. The entertainment winds up with Brock's magnificent fireworks display. A rival flery show, and a tip-top one, too, is Pain's spectacle of Venice at West Brighton, where large crowds are in attendance on every propitious night. For fourteen weeks the French mimic, Stainville, has triumphed on the Casino's roof garden. He will end his engagement Sept. 2, and on the following day will sail for Europe. His impersonation of prominent Americans has won him much praise, while his foreign caricatures are heartily enjovable. Others on the Casino's roof bill include Lizzie Derious Daly, La Granadina Prof. Senac, and the Berra troupe. The roof programme at the Madison Squaro Carden is very moritorlous, and the list of entertainers remains practically unchanged. Beginning Sunday, Sept. 4, Anton Seidl will give a series of promenade concerts in the amphitheatre.

"The White Squadron" has only a week

comedian: Dan Daly, Witmark, J. C. Miron, and others of the former cast were welcomed appropriately. The Broadway Park will open to morrow night with a variety programme. Hyde & Behman, its lessees, assume the management this season. They have made extensive alterations during the past few weeks. From a decorative point of view, also, the house presents a decided improvement over its last year's appearance. A dozen sets of new scenery have been painted by De la Harpe. Froquent changes of bill will be the policy of the management, and, during the year, the pick of the vaudeville companies, both from this country and abroad, will be seen there. The scale of prices will be popular—25, 50, and 75 cents. The attraction for the ensuing week is Hyde & Hehman's Company. Among the performers are Helene Mora, the female baritone, who was something of a sensation in Europe last season; Conroy and Fox, Frank Bush, Ross and Fenton, and Marco and Athol in their novel act. "The Lizard's Nest." The atterpiece will be a comedy sketch, said to have been performed many nights in Loadon, and called "The Mason." The Bijou and Herrmann's remain in darkness, but not for many days longer. The Bijou opens next week with Jennie Yeamann's starts on Sept. 17 with Herrmann himself in his illusions.

Mrs. Potter has sailed for this city, and there

Mrs. Potter has sailed for this city, and there Mrs. Potter has sailed for this city, and there is no longer doubt that she will act here. The truth is that she agreed to come over without hesitation. While John Stetson, the Boaton manager, was abroad this summer he met her, and before he left she had signed to appear under his management. She will receive a sailary and will have no interest in the tour. Kyrls Bellew, who is engaging the company, will also act for a stated sum each week; and it is known, too, that Bellew and Mrs. Potter are engaged on separate contracts by the will stetson. The new play, purchased by Stetson, is from a Zola novel, and will be tested in Boston; if it fails, Mrs. Potter will fall back on her repertory. An admirable actress has joined Charles Frohman's forces in Mary Shaw. She will go into the John Drew support. Miss Shaw has starred promisingly, and she is a very ambitions and clevor woman. "The Dazzler." that wild variety farce with more noise than wit, is to have another star. Lydia Thompson was its first headlight, the late kate Castleton its second, and Emma Hanley its third; but Miss Hanley has developed "an affection of her vocal chords," so her manager declares, and she will retire. To fill her place Anna Boyd, inte of "A Trip to Chinatown," has been engaged. Charles Frohman has counted his companies. He will have sixteen troupes on the road this season, to say nothing of that high-priced "outside attraction." Lottic Collins. This showing tops the record, by all means. Theress Leitner, the Amborg's leading actress last year, is going to try an English-speaking tour. Martia Morton will supply the play, and the irraulein will study assiduously until she is ready to start. Francis Wilson and his wife will sail for Euroue this week. The comedian's next season will not open until Nov. 14, and he will stick to "The Lion Tamer." Ernst Possart, the German tragedian, has decided not to fulfi his contract for an American tour under Stuart Robson's control. Robson had sone to some expense, but Possart pleaded in health, and there is no longer doubt that she will act here. The truth is that she agreed to come over without

Something unusual, but not unprecedented, will occur in this week's amusements. "A Trip to Chinatown" will be acted Trip to Chinatown" will be acted simultaneously at two theatros—the Madison Squaro and the Harlem Opera House. The achievement is noteworthy, to be sure, but it has led somebody on Hovt's staff into the error of an nouncing that this is "the lirst time in the annals of the American stage" that such a thing has occurred. It is well to remember that nearly forty years ago "Uncle Tom's Cabin" was simultaneously acted at two city play-houses, and that four or five other pieces have since had a similar record here, not to mention "Pinafore." In Landon, indeed, "Uncle Tom" was at one time, at the height of its success, running on the boards of no fewer than twenty theatres at one time. Hoyt's "Trip," however, will be enjoyed hugely, up fown as well as down town. Many changes have been made in the cast, necessarily. Anna Boyd, who has played The Widow since the piece was first acted, has retired to become the star of "The Dazzler" on the road. Her role in the Madison Square cast will be assumed to-morrow and thereafter by Geraldino McCann, a pretty girl and a lively soubrotte. In Harlem The Widow will be Laura Biggar, a newcomer in the Hoyt forces. Miss Biggar has been a star in "She" and other plays, and has enjoyed a varied and heipful experience on the circuits. Burt Haveriy will play the hypochondriac, Wediand Stong, in Harlem, and Minnle Renwood will do her serpentine dance there, while Bessie Clayton will perform her high kicking at the Madison Square, as before. Gilfoil and Beane are also to go to Harlem to play their original roles. It was at the Harlem Opera House that this jolly play had its introduction to New York. taneously at two theatres—the Madison Square this jolly play had its introduction to New York.

Plagiarism of plays will be more than usuend, the Notonian, Prants. Wilcon, and the least the proposal product of the concent made more elasticated. A more consolium will come into Recolution of the Control of th ally prevalent this season, but the offenders will be detected and exposed in most cases The Windsor has had old material disguise

POEMS WORTH READING.

Not a tear was shed with our sighs of relief, As out of the White House be hurried; Not a Force bill bayonet stood on guard At the polls, where poer Benny was buried. We buried him slowly from morn till night. As the leaves of November were falling; By the ample rays of the solar light, Beyond any chance of recalling.

No useless casket enclosed his remains, Nor in sheets, nor in flags we wound him: But he lay like a soldier that's got his does, With the Bloody Shirt Wrapped around him

Long and loud were the prayers we said, As his years of buildoning were over; And we eagerly boosted him out of the chair, To make room for Adlat and Grover.

We thought, as returns from New York came in. All his chances and hopes to smother.
Will the great James G. now dance with give On the grave of his long-lost brother !

On the Eighth of November's setting sun-We heard the great puff of the burial gun. And then came our turn for fring. Tis the last sad blow to graff old Ben,

As we leave him alone in his dotage; Turning sorrow to glee with Haby NcKee On the porch of his Cape May cottage. Ilia desire was eager for Force bill fame,

In the depths of his grandfather's beaver. MOBILE, Aug. 25. Jack Sharren.

" Not In It."

From the Botton Transcript.

Down in the green orchard, cool and shady.

A hammock swings dreamily to and fro.

And in it is sitting the daintiest lady,

and by her side is her summer beau;

His glances with fond admiration are laden,

He whispers his love in her willing ear;

Now, would you believe it? I that frivolous maiden

Once listened, to me in that way last year;

Yea, listened and promised her love to me ouly,

And therefore I can't say I reliab this show;

Ferhaps I'm a fool, but I feel rather lonely,

For I'm not in it to-day, don't you know.

For I'm not in it to-day, don't you know.

Down in the green orchard, cool and shady,
A hammock gives way with a terrible crack;
Then all in a heap falls the dainty young lady,
And younge her lover lies dat on his back.

His features a startised reason and a starting.
He spirit coult gravel and mentally awaring
He never will awing in a hammook again;
And as for the maid, she's the picture of sadness,
And is for the maid, she's the picture of sadness,
And invarily chuckle with satished gladness,
For I'm not in it to-day, don't you know.

Many G. Herry MARY G. BICKLE

From the Albany Argus. Behold this rare fromona: master it,
"Twill sing as 'twere an angel; but to hands'
Unsuited 'tis but for mantel rabbish fit;
Old worth so much. One reads and understands.
Twas wont to shake men's hearts, as when the w
Sets all the leaves a quiver. Now it lies
With all its aweet soul mute and undivined.
Priced at so much. A soul for sale; who buys?

One says 'tis scratched and ugly, gummed and stained;
He can buy handsomer for less. No doub!
Another spiesa orack, or real, or felmed;
A third notes fraud, is pleased to point it out.
Endure, endure, thou master's child! Even so
Are noble spirits carped at, all unknown.
While in their hearts divinely swell and flow
The harmonies which genius hears alone.

Jaws Becknam.

Swing Away, Baby, From the St. James's Guzette, Swing away, Raby, in the tree top; Though the wind blows, I've no tear that you'll drop; Should the bough break it wou't matter at all; Others below you can catch in your fail. Swing away, Haby; your little fist Shows how your forefathers used to exist; In your wee fingers a Robinson sees Proof that your ancestors lived up in tree. Swing away, Baby: if your hand grows Tired, you can rest it by using your toes, Ere boots and shoes have distorted the shape, Due to the ancient quadrumanous ape.

Swing away, Baby. Monkey and man, Both have been made upon one common plan, One missing feature you'll live to bewall: Only a rudiment's left of your tail. Swing swar, Raby, swing! You have not Need of a cradle, a crib, or a cot, Mansion or cottage, or lodgings or flat: Trees, only trees, are your true babitat.

The Summer Strl. From the Somerville Journal. The Summer Girl is coming home.

Ail browned, and plump, and rosy,
Prepared to make the winter seem
Extremely nice and cosey. She 's bathed, and danced, and walked, and salled, And read a book, and filrted, Till to the young men she has left The whole world seems deserted.

The flush of health is in her cheeks, with fun her eyes are dancing; With fun her eyes are dancing; The flush of conquest in her heart Makes life seem most entrancing. Ah, soon she'll be the Winter Girl.
And we shall bow before her;

From the Youth's Compa Sometimes, when the scent of early May Sifts through my window, a soft spring day, I shat my eyes and can seem to see Little lame Jim in the apple tree, Playing unpire. "just for fun" in the races he never might hope to run, And can hear him laugh as he shouted, gay "One to make ready!

Three, and Away!"

Never a race was there for Jim.
Never a course marked out for him.
But always, the boys, with lender care.
Bure him out in the soft May air.
And boskered him up in the tree in state.
With a "There, old feller! sin't that great?
Now give us a start; that verse you know:
One, to make ready;
Two, to be steady;
Three, and, Go?"

Over the brook and down the lane.
Through the meadow and back again;
And Jim would forgot his dignity,
and lean far out from his perch to see,
Watching the boys as they leaped the wall,
"list Run, Bill, run." I could hear him call,
and his chanting outer as the victors came:
"The first's the best,
The last's the worst of all the game."

Dear little Jim ! His race is run.
His wais are cleared and his victory won.
And the hops run their eyes with grimp paws.
"We can't run races" they say, "because
jim's not in the tree to start us fair.
It's no fun playing with Jim not there.
Nobody else know how to say;
One to make ready!
Three, and away!"

Effective Playing,

Marrie B. Burres.

From the Boston Courier,
Though I concede my better bail
For music has no passion.
Nor skill with any instrument.
That now is in the fashion;
No taient for fantasas.
Oavottes or oline.
Let there is music in the air
Whene'er she plays the hose.

She starts to sprinkle down the street, And meanwhile soaks and saturates A passing picnic party,
A passing picnic party,
As by the parson goes,
And thus the baby soresched and choked
When my wife plays the hose.

She thinks to spray a porch that long lier care has been lawing.
And storms the opposite lies where
I must be the opposite lies where
I must be lies and lies.
The gashing fountain throws.
And wakes a pessionate response
When'er she plays the bose.

Grab Street, London, 1789. From the Allany Evening Journal, O dingy street where genius its. Half clad, her torch, where Johnson's wit Floughed through the presence of his time, Where Holdamith built, he lefty rhyme, And Savage died, and Smollett writ. Where Garrick, born to charm the pit, First made the royal buskins fit, And trod the tragic stage sublime; O dingy street!

A dreary street in longer fit started authors in and out of it. They dradge not more in gloom and grims. In dens death, in caves of crime. To kinder falsa they now submit. Odingy street! J. N. MATTHEWS.

The Crickets' Midsummer Night's Song. Krick, krick, krick, krick, lan't it hot ! Isn't it hot Krickety krick, krickety krick, Whether you're well, whether you're sick,

> Kricky, kricky, kricky, krick; Krick, krick, krick, krick. No breath of a breeze Kricky, kricky, kricky, krick, isn't it hot ! Isn't it hot!

Isn't it hot ! Isn't it hot !

The locusts chirr, the tree toads cheep: Too hot to sleep! Too hot to sleep! We sing it, too. The long night through; Now high, now low. Now quick, now clow; Fgad : Fgad : Egad : Kricky, kricky, kricky, krick;

Krick, krick, Lrick, krick.

Whather you like it or not; lan's it bad! W. D. BILWANGER lan't it hot, hot, bott

NOTES ON SCIENCE AND INDUSTRY.

A simple and effective method of examining mines, in respect to their prevalent atmosphere, has for some time past been employed at Kotscheld, near Anchen, Germany, and is likely, from its results, to be extensively resorted to. A gasholder is placed in the chief ventilating shaft, and is so arranged that it becomes filled in twelve hours, in this way it being possible to obtain a fair average sample of the mine air. The air thus collected is examined by means of a grisometer, any free carbonic acid gas that may be present is absorbed by caustic soda, and its percentage estimated by noting the diminution in bulk. The marsh gas is then decomposed by a platinum wire heated to incandescence by means of an electric current. A further diminution in bulk takes place under this arrangement, and the degree being noted, the percentage of marsh gas in the pit air can be calculated, and the necessary precautions be observed accordingly. ventilating shaft, and is so arranged that it

Some of the points of difference between ramic fibre and silk as materials for manufactured goods are regarded as in favor of the former, according to the most recent tests, and though not possessing the gloss characterizing ordinary silk, partakes more of the dead silk property in black, so much desired in expensive goods. Silk, however, is wound off the coccons from eight hundred to one thousand yards long, and doubled in the winding seven strands, while ramie, being short, must be carded and spun like raw silk, or broken silk, and therefore is not mixed with line silk in the way sometimes sp. ken of; it is, after made into thread, used to mix in the body, the strongest parts needed for the warp or filling, and sometimes for the body of the fabric-silk being used for the raised glossy figures or flowers, thus giving a tasty contrast and exquisite shading. In wool mixtures, ramie can be cut or graded to the even lengths, and corded and spun as a complete mixture, benefiting the wool by its superior strength, gloss, and finish, the wool making the nap and warmth, the ramie alone being porous and cool for summer wear.

In a chemical lecture given by Mr. Thomas Turner, the well-known metallurgist at Birmingham, England, the statement is made, as embodying the results of his own practical experience, covering many years, in cast-iron manufactures, that, where special strength is needed, care is essential to have not only the right chemical composition, but also the size and shape of the casting, suitable to the iron employed, some iron being stronger in small castings than in large, while, in exceptional instances, just the opposite is the case. According to this authority, too, there are in some forms of patterns, with abrupt changes of shape, planes of crystallization developed, and these are the causes of weakness. Consequently, where great crushing strength is required, the iron should be hard and white, or nearly so; for transverse strength a very close-grained gray iron gives the best result; and where tensile strength is most wanted, the requisite characteristics of the iron are that it should be soft and a good working metal, but still close and dense; again, when iron is too solt it runs easily and fills the mould, but it is weak. needed, care is essential to have not only the

For use under certain conditions, an important improvement has been made in the construction of locomotive steam permanent way travelling cranes. In a sixteen-ton apparatus of this kind the operating engines consist of a pair of the vertical type, with cylinders eight and one-half inches diameter and twelve-inch stroke, and those receive steam from a boiler seven feet six inches high and four feet six inches diameter, low built, with a large combustion chamber over the firebox, and Gallowsy tubes; the boiler has been tested hydraulically up to 150 pounds, and by steam up to between seventy-live and eighty pounds per square inch. The jib is constructed on the lattice p inciple, with a curved head to allow of heavy loads being dealt with; the crab sides are of mild steel plates. Ifrmly secured to the top and bottom swivels, and the latter have anti-friction rollers for running on a turned path, to reduced the stress caused by the load on the central column. The hoisting motion is of double-purchase spur gearing, controlled by a clutch and lever and powerful friction brake. A feed pump, injector, and tank are provided for supplying the feed water. The carriage is propelled by bevel wheels gearing with the engine shaft by means of spur and mitre wheels, and driving the transverse shaft under the carriage, on which are two cranks connected up by coupling rods and cranks to the travelling wheels of the crane.

It is a somewhat remarkable fact that, though and one-half inches diameter and twelve-inch

It is a somewhat remarkable fact that, though steel is intermediate in chemical composition between wrought iron and cast iron, containing more carbon than the one and less than the other, its properties are quite different from either of them; it may be made to resemble either of them alternately, but it is principally used in a third condition, and in its capacity to assume which the great value of steel consists. Briefly, annealed steel has nearly all the properties of lead, being very soft and mallable; hardened steel has nearly all the properties of glass, being very hard and brittle; tempered steel has most of the properties of whalebone, being hard butlest the same time elastic. The chemical change which takes place during these processes has not yet been discovered. Again, it is a remarkable fact that the specific gravity of hardened steel is less than that of the unhardened another singular point being that steel, of course, expands with heat, and when it is allowed to cool slowly regains its original size; but if it be cooled suddenly, the only way in which it can be hardened, although it contracts very much, it does not quite reach the small size of the unhardened state. from either of them; it may be made to re-

The Danube River, which is the means of water communication for Vienna with the Red Sea, is not navigable by large ships, owing to shoals and rapid currents; but the Austrian Government is endeavoring to remove the obstudes, the chief of these being what is known stacles, the chief of these being what is known as the Iron Gate, a rocky gorge between Roumania and Servin on the Hungarian boundary. The engineering work now being conducted for this purpose contemplates a channel some six thousand eight hundred feet long, the sides of the channel to be formed by two walls of masonry; the river bed between these walls to be blasted out, the amount of rock necessary to be thus removed being about three hundred and twenty-two thousand cubic yards, and in order to secure the necessary depth to the water the upper end of the walls has to be flared out to form a funnel-shaped channel.

Coal washers are now being introduced in a modified form of the piston-jigger, having a arrangement for scraping the surface and removing the top of the washer layer under treat-ment. It consists of a slove plate. 10 feet long ment. It consists of a sieve plate, 10 feet long and 3½ feet wide, the apertures being largest next to the feed end, fixed on a pyramidal hutch, having a plunger box attached to one of the long slides, and an opening variable by adjustable slides for the discharge of the heavier waste on the other. The piston is a circular wooden disc moved by an eccentric and communicating motion of the water in the hutch through a cushlon of air confined above the water in the piston box. The scraper is a harrow-like frame suspended by a system of jointed rods above the sleve plate, and receives motion from a cam acting upon the counterpoised arm of an angle lever, which gives a slow forward and quick return motion. The frame is connected with a slide, opening the feed hopper, so as to allow a fresh portion of material to be dropped upon the plate at the coarse end, at the commencement of each stroke, where it is subjected to the most energetic action of the water, while the finer portions of provious charges brought to the surface are drawn forward by the teeth projecting from the frame toward the discharging end. Usually the frame is so suspended as to pass clear of the charge on the return stroke.

An improved form of radial drill is now built. which appears to realize the highest attainable usefulness of that instrument. It has a length of arm measuring 7 feet and 6 inches, and will drill to the centre of a circle 12 feet 2 inches in diameter. In addition to the other features of diameter. In addition to the other features of this machine which render it peculiarly advantageous for the best kind of work, provision is made for readily moving the saddle on the arm, either from the end of the arm or by a hand wheel on the saddle itself, the latter being conveniently connected by hevel genre to the splined shaft which runs along under the arm, and by means of spur gears is connected to the traversing screw. The diameter of the column is fifteen seconds; height, 10 feet; height over all, including the countershaft, 14 feet; weight, about 15,000 pounds.

According to a foreign journal, the most practicable method of joining narrow vulcan ized rubber belts, both ends having been put together at a right angle, they are to be proded with two rows of holes, and strapped together. With broad beits, either a thin piece of leather or a piece of rubber belt is to be used on the back side, in order to strengthen the connection—the pieces used for this purpose to correspond in length according to the width of the beit, and sowed or riveted in place, and, in sewing, the belts should be placed on a belt stretcher, in order to avoid injury. They are also materially improved and made more durable by applying a coating composed of equal parts of black lead and litharge boiled in linesed oil, a sufficient quantity of lac being added to insure speedy drying. If, from any cruse, the rubber should scale off, the belt is to be coated anew; in case of any tendency to slide, the inside is to be moistened with linesed oil. together. With broad belts, either a thin piece "I hope he will," said Dr. Bushnell, "and for himself, ioo."

ANTI-TROLLEY HUMBUG. Views and Explanations of an Authority on

From the Electrical Resint. tional nonsense in the daily press about the trolley system, to read in the Pittsburgh Dispaich, under the above heading, such sensible remarks as these:

paich, under the above heading, such sensible remarks as these:

"The factitious nature of the altempt to make the public believe in certain cities that its trolley is exceptionally deadly is revealed in a striken light by the last article in the New York Borld on that subject. This article contains a list of the accidents on the electric lines in tolumbus for the year ended with the first of this mouth. It gives a list of seventy-six alleged accidents, and of that number there was exactly one caused by electric above due to the peculiar nature of the mouth. It gives a list of seventy-six alleged accidents, and of that number there was exactly one caused by electric above due to the peculiar nature of the fill of the seventy-five were such as any method of trainst faster than the horse cars. For instance, of the seventy-five were such as any method of trainst faster than the horse cars blinbe to; and some of them are common to the horse stars. For instance, when we find the list weeled by such examples as the following. "Unknown woman severely injured white stepping off car, we are impelied to ask whether it is the view of the opponents of the troiley that cars should be furnished which people will not have to step off from. It is the case that fouriers of the average assumities were those of persons injured white getting one off the cars, a class of accidents only possible from the carlesses or weakness of the passangers. Almost the entire list of casuaties thus produced to show the deadly nature of the strilley ayetter is risk thing some sort. It may prove that the relief of the shortes cars, but, so far as the peculiar nature of the tordey is concerned, the same hatter accidents due from it yields surprisingly small returns.

"The troilog should be abolished, when a practical substitute is found for it, on account of its renumbrance of the stress. But the evident attempt to manufacture calamity lists with which it can be charged proves its own faisity by the fact that about we percent of the class of the str

When one reads the absurd headlines continually set forth in the newspapers, such as "The Fatal Trolley," "Trolley's Latest Victim."
"Another Death by Trolley," &c., and then reads on only to find it a case of mechanical secident, with which the electric current had nothing to do, one is inclined to ask why great metropolitan newspapers should be guilty of such debauchery of truth. As a rule, the newspaper of the period is nothing if not sensational. Newspapers, like other pusiness enter-prises, are conducted for profit, and profit lies in a heavy circulation and extensive advertisements. Sensational news attracts a mass of idle readers, and advertisers keep watchful of the fact. But when the press fills its columns with such arrant ponsense as it does about the trolley system, it does a wrong to a legitimate

enterprise, and makes a fool of itself. Dignified and conscientious criticism is right and is welcome at all times, but with scarcely an exception the articles published on the trol-ley in the daily papers only make their claims to enlightenment and knowledge of true progress a subject for contemptuous cachinnation among the technical journals and those of the masses who observe and sift out the truth for themselves. It seems to us it is the duty of the managers of the daily press to put a stop to this wholesale prostitution of facts about

the managers of the daily press to put a stop to this wholesale prostitution of facts about the trolley system.

The Pittsburgh Dispatch is a good example of careful consideration and truth seeking. It has analyzed the wild statements made by another paper and found the truth, namely, that 18 per cent, of the casualities cited are not due to the trolley at all. They are due to a variety of causes, incident to any system of rapid transit. Every one of these opponents of the trolley at mits there is no objection to the storage battery system of propulsion. This is curious, seeing that the 18 per cent of accidents would be just as liable with the one as with the other. The speed would be the same, the motors the same, the humming of the commutator the same. Mechanical accidents rom carelessness and neglect of rules by passengers would be and are just as frequent. Hence, the greater part of the objections of such opponents is mere twaddle and betrays their insincerity.

The only valid objection then must be simply that which distinguishes the trolley from the storage system, and that is the existence in the former of the overhead wires, and of these only the bare trolley wires can be the objectors would have the trolley wire prohibited if they could, blaming every accident on electricity and forgetting that mechanics has anything to do with the matter. But, as a matter of fact, mechanical construction has in many cases been faulty lowing to want of experience, of coursel, and the poor engineering has resulted in a broken and fallen trolley wire. The electrical feature is not to biame, the mechanical is: but the attack centres on the electrical factor all the same. It cannot hold itself up any more than the Brooklyn Bridge. The latter is but a gigantic span of wires, but its engineers built for durability on data previously experienced. Only now practically are our electric trolley engineers in the position to know just what does meet the requirements, and trolley wires are being put up, which will stay un. The only

the whole aerial structure, the objection becomestrivial.

As to accidents from the electric shock, the
frolloy system surely has made a aplendid
record. Even its bitterest enemy cannot use
the lingers of one hand in summing up such
accidents to passengers, although several
billion passengers have been carried unharmed by the many electric rallways in the
United States.

Newspaper writers should stop and think

United States.

Newspaper writers should stop and think before making their absurd declarations. They should remember that capital is most sensitive about investment; that conservative business men have invested nearly \$200,000,000 in secrific railways in this country, and in so doing have vastly enhanced the public convenience. It is almost the universal experience that where one passenger rode behind horses, two passengers now use the motor cars. Is it not, then, absurd for the newspapers to contend that the trolley is dangerous to life and limb, and to try to give the impression that the trolley system is admittedly but a temporary makeshift? Is it not a little peculiar that all these assertions are in the nature of predictions and not the relation of facts realized? Do we hear continually of demands for the taking down of the trolley system in localities where its advantages have been tested?

Let the newspapers be a little more liberal to scientific attainments and accurate writing in selecting editors, and they will be not only guilty of less self-stuitification, but will do less injustice to legitimate enterprises of large importance and great public convenience. writers should stop and think

WHEN GREELEY THREATENED TO PRAY An Incident of the First Meeting of the Free Soil Party in Saratega. From the Presbyterian.

Soil Party in Saratega.

To those who have come to Saratega for a number of years it has become full of reminiscences and of memories freship awakened by the old haunts. We looked at a spot on the parza of one of the large hotels at which a group of men were wont to gather in the evening long years ago. The writer was the youngest of the company, and, though not the oldest, the chiefest of thom was Dr. Horace Bushnell of Hartford, then in his splendid prime.

The Free Soil party was starting late existence, and to consolidate and enlarge the party in the State of New York a convention was held in Saratega, followed by a mass meeting in the woods adjacent to Congress Spring. Horace Greeley was the animating spirit of the movement, and on the platform of the mass meeting the white coat and the white faces of the famous editor were conspicuous. The managers of the infant party, which was setting up its banner as a party of high moral ideas, sought for it the benefit of clergy, and asked Dr. Bushnell to open the meeting in the woods with praver. He declined, and advised the gentleman who brought the request to secure the services of liev. Dr. Cheever, who was then in Saratega, and who, he thought, had taken up a position on the growing anti-slavery entroversy in advance of his own, and, therefore, could more earnessly pray in their behalf.

Both divines were, however, on the platform into the surrounding woods. Dr. Bushnell saw the movement, and wan friends woods with praver by the freedom stepped away from the platform into the surrounding woods. Dr. Bushnell saw the movement, and wan friends and preliminaries were attended to, a President and Sercetary elected and installed in their places, and when the President stepped forward and said. The meeting will be opened with praver by the Rev. Dr. Cheever we not present, but I have the pleasure of saying that praver will be made by the leev, Dr. Bushnell was not to be seen. The Chairman received from the seen reluctant to favor us with their services we will have to p

RUSSIAN HEBREWS. New Light on the Emigration Question

From the Figuro.

Among the many misunderstandings when sha aliliance there is one which is much to be regretted, and that is the so-called "perseaution of the Jews in Russia." Tylegram destroy the standard of the service of the Jews in Russia. Tylegram destroy the perseaution of the Jews in Russia. Tylegram destroy the perseaution of the Jews in Russia. Tylegram destroy the Jews in the Jews in Russia in Russia and the Jews in Russia and the Palatinate. Contrary to a wide-changuage does not contin any more Hebraw words. Helrow, for the Israelites of Russia Russia, the Jews in Russia and the Palatinate. Contrary to a wide-changuage does not contin any more Hebraw words. Helrow, for the Israelites of Russia. And what would we say in France I. Instead of Russia and the Palatinate. Contrary to a wide-say, the sacred thom, the language of prayer. In everyfay life they speak German.

And what would we say in France I. Instead and what would we say in France I. Instead Russia, nearly three millions and a half of Germanth of More and the Palatinate and the Russia an

CONNECTICUT PEACHES ALL RIGHT. Some Will Go to California for Comparison with the Fruit There.

SAYBROOK. Aug. 27. - Connecticut maidens and matrons, having gathered most of the huckleberry crop, are as busy as bees now in the great peach orchards, helping to barvest the biggest and best peach crop in the history of the State. Many women, young and old. made as much as from \$25 to \$60 at stripping the huckleberry bushes, and they will double that income during the peach harvest. Their part of the work is that of sorting the fruit, and very expert sorters are they. Their fin-gers have acquired suppleness and quickness in the berry fields, and they handle the peaches

with a rush.
The greatest orchards are in the Connecticut Valley, especially in the Berlin and Deep River region, and pretty, interesting, and lively is the scene presented therein harvest time. The trees, in orderly rows, are so heavily laden their branches are bowed to the ground, and the yellow and crimson fruit shows brilliantly amid the dark, lustrous leaves. Squads of pickers work nimbly in different parts of the big orchards, gathering the peaches and piling them in fruit carts, and the heavily laden trains, with creaking wheels, toil continually among the trees over the silky grass, away to the licking house. It is a busy and pleasant scene at the house. The work of grading the big piles of handsome, lesched fruit according to its size is rapidly done with machines, and the business of the girls is to wrap and pack it is baskets. They sing and chat at their work, and chaff and loke with the drivers. From the packing house the baskets of fruit are wheeled to the Bertin railroad station, placed aboard freight cars, and forwarded to all parts of southern New England. It is believed that most of the connecticut peach crop, which will be not less than 60,000 or 75,000 baskets, will be not less than 60,000 or 75,000 baskets, will be consumed right here in the State, though agents of metropolitan. Boston, and Providence fruit handlers gobbled up a fair share of it. A few thousand baskets will go to Springfield, Mass., but the Connecticut housewives, who want no end of the fruit for canning, sooke early, made high bids for it, and engaged about two-thirds of the crop.

The first crop of Connecticut peaches is all ready for market in the valley. One big peach raiser, J. H. Hale of South Glast orbury, says that his 1822 crop will exceed his famous one of 1882, and he is very locky, as are all other Nutmer State raisers, show the beliaware and Maryland crop is almost a flatiniture. Most of the peaches now in market come iron California, who, he says, are betting on the relative ment of itale's peaches and California and trip. But I have accepted the challenge all the same, and have sent a rather choice are: these do not be sup for the westward-bound trip. But I have accepted the challenge all the same, and have sent a rather choice accepted the challenge all the same, and have sent a rather choice accepted the challenge all the same, and have sent a rather choice accepted the challenge all the same, and have sent a rather choice accepted the challenge all the same, and have them in fruit carts, and the heavily lades trains, with creaking wheels, toil continually